



6SF7



6SF7

**DIODE - SUPER-CONTROL AMPLIFIER PENTODE**

## SINGLE-ENDED METAL TYPE

|                                                  |                             |                       |
|--------------------------------------------------|-----------------------------|-----------------------|
| Heater                                           | Coated Unipotential Cathode |                       |
| Voltage                                          | 6.3                         | a-c or d-c volts      |
| Current                                          | 0.3                         | amp.                  |
| Direct Interelectrode Capacitances: <sup>o</sup> |                             |                       |
| <i>Pentode Unit</i>                              |                             |                       |
| Grid to Plate                                    | 0.004 max.                  | μf                    |
| Input                                            | 5.5                         | μf                    |
| Output                                           | 6.0                         | μf                    |
| Pentode Grid to Diode                            | 0.002 max.                  | μf                    |
| Pentode Plate to Diode                           | 0.8                         | μf                    |
| Maximum Overall Length                           | 2-5/8"                      |                       |
| Maximum Seated Height                            | 2-1/16"                     |                       |
| Maximum Diameter                                 | 1-5/16"                     |                       |
| Bulb                                             | Metal Shell, MT-8           |                       |
| Base                                             | Small Wafer Octal 8-Pin     |                       |
| Pin 1 - Shell                                    |                             | Pin 5 - Diode Plate   |
| Pin 2 - Pentode Grid                             |                             | Pin 6 - Pentode Plate |
| Pin 3 - Cathode                                  |                             | Pin 7 - Heater        |
| Pin 4 - Screen                                   |                             | Pin 8 - Heater        |
| Mounting Position                                | Any                         |                       |

## BOTTOM VIEW (7AZ)

PENTODE UNIT - AMPLIFIER

|                                                                               |                 |
|-------------------------------------------------------------------------------|-----------------|
| Plate Voltage                                                                 | 300 max. volts  |
| Screen Voltage                                                                | 100 max. volts  |
| Screen-Supply Voltage                                                         | 300 max. volts  |
| Grid Voltage                                                                  | 0 min. volts    |
| Plate Dissipation                                                             | 3.5 max. watts  |
| Screen Dissipation                                                            | 0.5 max. watt   |
| <i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i> |                 |
| Plate                                                                         | 100 250 volts   |
| Screen                                                                        | 100 100 volts   |
| Grid                                                                          | -1 -1 volts     |
| Plate Resistance (Approx.)                                                    | 0.2 0.7 megohm  |
| Transconductance                                                              | 1975 2050 μmhos |
| Grid Bias (Approx.) †                                                         | -35 -35 volts   |
| Plate Current                                                                 | 12 12.4 ma.     |
| Screen Current                                                                | 3.4 3.3 ma.     |

DIODE UNIT - One

Consideration of this unit is similar to that given under Type 6B8-G with the exception that there is one diode in Type 6SF7. Diode curves shown under Type 6B7 apply to the 6SF7.

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

° With shell connected to cathode.

† For transconductance of 10 μmhos.

← Indicates a change.

Dec. 1, 1941

RCA RADOTRON DIVISION  
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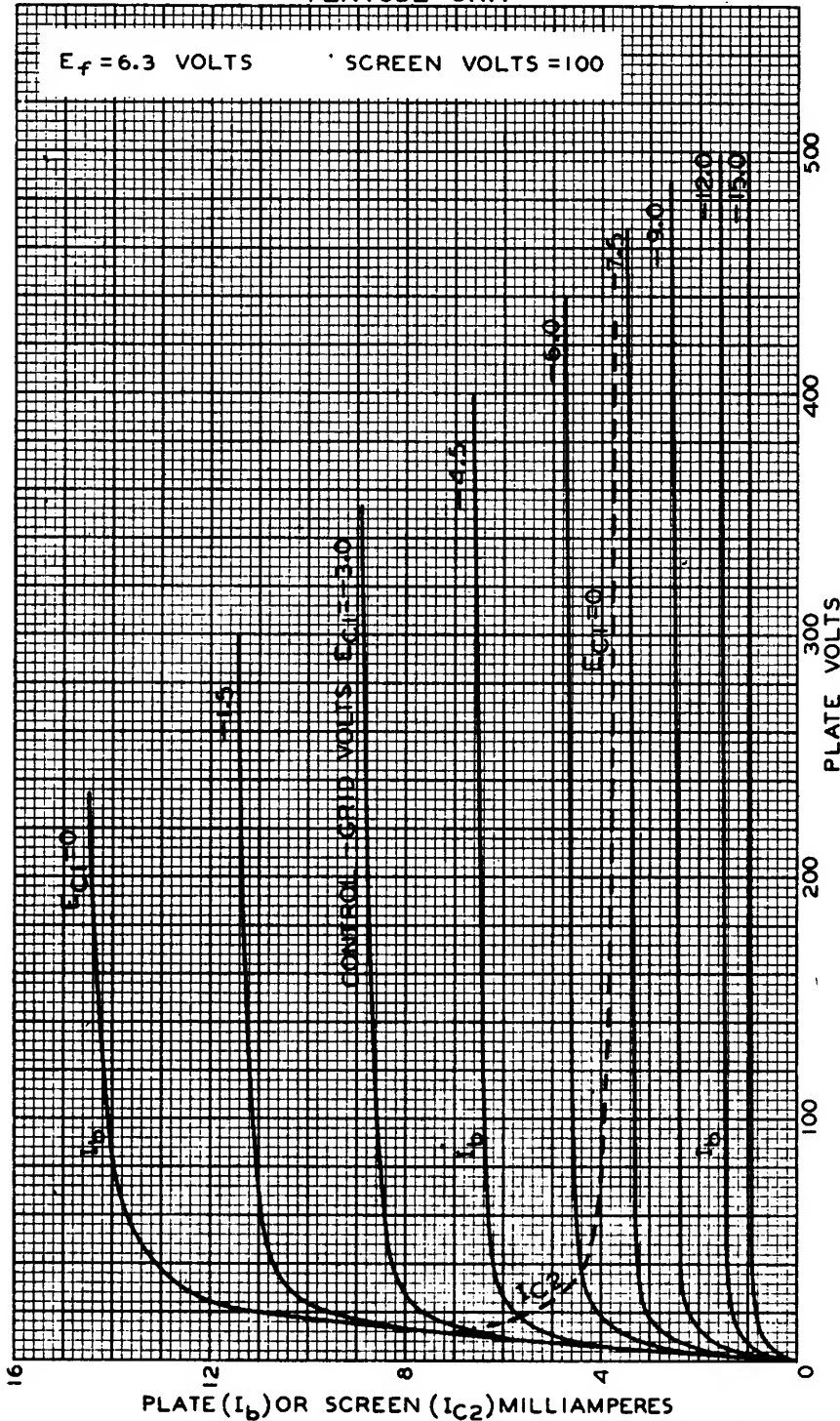
TENTATIVE DATA

6SF7



6SF7

# AVERAGE PLATE CHARACTERISTICS PENTODE UNIT



FEB. 20, 1941

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